

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

---

In re Patent Application of:  
Tatsuya IGARASHI et al.

Application No.: 10/530,289

Confirmation No.: 7753

Filed: April 5, 2005

Art Unit: 1794

For: ORGANIC ELECTROLUMINESCENT  
DEVICE

---

Examiner: D. L. Garrett

**DECLARATION UNDER 37 C.F.R. § 1.132**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Madam:

I, Toshihiro Ise, declare and say as follows:

I am named as a co-inventor of the above-identified application.

The  $I_p$  of the hole injection/transport compound (eV) (labeled in the attached Table as " $I_p$  of H") and the  $E_a$  of the electron injection/transport compound (eV) (labeled in the attached Table as " $E_a$  of E") are additionally described in the Table of the previously submitted test data. Furthermore, "O" is provided under "condition for T1" in the attached Table when the limitation "the electron injection/transport compound, the hole injection/transport compound, and the green or blue phosphorescent compound each has a  $T_1$  value of 62 kcal/mole or more" is met, and "X" is provided when the limitation is not met.

As shown in the attached Table, it is extremely difficult to meet both of the conditions for  $I_p$  and  $E_a$  and the condition for  $T_1$ . In fact, only the inventive examples and not the comparative examples meet all of the conditions.

The undersigned declares further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S. Code 1001 and that such willful false statements may jeopardize the validity of this application or any patent issuing thereon.

By: Toshihiro Ise  
Dr. Toshihiro Ise

Date: Aug. 11, 2009

Additional Example	TC (C <sub>1</sub> U <sub>1</sub> U <sub>2</sub> U <sub>3</sub> U <sub>4</sub> U <sub>5</sub> U <sub>6</sub> U <sub>7</sub> U <sub>8</sub> U <sub>9</sub> U <sub>10</sub> U <sub>11</sub> U <sub>12</sub> U <sub>13</sub> U <sub>14</sub> U <sub>15</sub> U <sub>16</sub> U <sub>17</sub> U <sub>18</sub> U <sub>19</sub> U <sub>20</sub> U <sub>21</sub> U <sub>22</sub> U <sub>23</sub> U <sub>24</sub> U <sub>25</sub> U <sub>26</sub> U <sub>27</sub> U <sub>28</sub> U <sub>29</sub> U <sub>30</sub> U <sub>31</sub> U <sub>32</sub> U <sub>33</sub> U <sub>34</sub> U <sub>35</sub> U <sub>36</sub> U <sub>37</sub> U <sub>38</sub> U <sub>39</sub> U <sub>40</sub> U <sub>41</sub> U <sub>42</sub> U <sub>43</sub> U <sub>44</sub> U <sub>45</sub> U <sub>46</sub> U <sub>47</sub> U <sub>48</sub> U <sub>49</sub> U <sub>50</sub> U <sub>51</sub> U <sub>52</sub> U <sub>53</sub> U <sub>54</sub> U <sub>55</sub> U <sub>56</sub> U <sub>57</sub> U <sub>58</sub> U <sub>59</sub> U <sub>60</sub> U <sub>61</sub> U <sub>62</sub> U <sub>63</sub> U <sub>64</sub> U <sub>65</sub> U <sub>66</sub> U <sub>67</sub> U <sub>68</sub> U <sub>69</sub> U <sub>70</sub> U <sub>71</sub> U <sub>72</sub> U <sub>73</sub> U <sub>74</sub> U <sub>75</sub> U <sub>76</sub> U <sub>77</sub> U <sub>78</sub> U <sub>79</sub> U <sub>80</sub> U <sub>81</sub> U <sub>82</sub> U <sub>83</sub> U <sub>84</sub> U <sub>85</sub> U <sub>86</sub> U <sub>87</sub> U <sub>88</sub> U <sub>89</sub> U <sub>90</sub> U <sub>91</sub> U <sub>92</sub> U <sub>93</sub> U <sub>94</sub> U <sub>95</sub> U <sub>96</sub> U <sub>97</sub> U <sub>98</sub> U <sub>99</sub> U <sub>100</sub> U <sub>101</sub> U <sub>102</sub> U <sub>103</sub> U <sub>104</sub> U <sub>105</sub> U <sub>106</sub> U <sub>107</sub> U <sub>108</sub> U <sub>109</sub> U <sub>110</sub> U <sub>111</sub> U <sub>112</sub> U <sub>113</sub> U <sub>114</sub> U <sub>115</sub> U <sub>116</sub> U <sub>117</sub> U <sub>118</sub> U <sub>119</sub> U <sub>120</sub> U <sub>121</sub> U <sub>122</sub> U <sub>123</sub> U <sub>124</sub> U <sub>125</sub> U <sub>126</sub> U <sub>127</sub> U <sub>128</sub> U <sub>129</sub> U <sub>130</sub> U <sub>131</sub> U <sub>132</sub> U <sub>133</sub> U <sub>134</sub> U <sub>135</sub> U <sub>136</sub> U <sub>137</sub> U <sub>138</sub> U <sub>139</sub> U <sub>140</sub> U <sub>141</sub> U <sub>142</sub> U <sub>143</sub> U <sub>144</sub> U <sub>145</sub> U <sub>146</sub> U <sub>147</sub> U <sub>148</sub> U <sub>149</sub> U <sub>150</sub> U <sub>151</sub> U <sub>152</sub> U <sub>153</sub> U <sub>154</sub> U <sub>155</sub> U <sub>156</sub> U <sub>157</sub> U <sub>158</sub> U <sub>159</sub> U <sub>160</sub> U <sub>161</sub> U <sub>162</sub> U <sub>163</sub> U <sub>164</sub> U <sub>165</sub> U <sub>166</sub> U <sub>167</sub> U <sub>168</sub> U <sub>169</sub> U <sub>170</sub> U <sub>171</sub> U <sub>172</sub> U <sub>173</sub> U <sub>174</sub> U <sub>175</sub> U <sub>176</sub> U <sub>177</sub> U <sub>178</sub> U <sub>179</sub> U <sub>180</sub> U <sub>181</sub> U <sub>182</sub> U <sub>183</sub> U <sub>184</sub> U <sub>185</sub> U <sub>186</sub> U <sub>187</sub> U <sub>188</sub> U <sub>189</sub> U <sub>190</sub> U <sub>191</sub> U <sub>192</sub> U <sub>193</sub> U <sub>194</sub> U <sub>195</sub> U <sub>196</sub> U <sub>197</sub> U <sub>198</sub> U <sub>199</sub> U <sub>200</sub> U <sub>201</sub> U <sub>202</sub> U <sub>203</sub> U <sub>204</sub> U <sub>205</sub> U <sub>206</sub> U <sub>207</sub> U <sub>208</sub> U <sub>209</sub> U <sub>210</sub> U <sub>211</sub> U <sub>212</sub> U <sub>213</sub> U <sub>214</sub> U <sub>215</sub> U <sub>216</sub> U <sub>217</sub> U <sub>218</sub> U <sub>219</sub> U <sub>220</sub> U <sub>221</sub> U <sub>222</sub> U <sub>223</sub> U <sub>224</sub> U <sub>225</sub> U <sub>226</sub> U <sub>227</sub> U <sub>228</sub> U <sub>229</sub> U <sub>230</sub> U <sub>231</sub> U <sub>232</sub> U <sub>233</sub> U <sub>234</sub> U <sub>235</sub> U <sub>236</sub> U <sub>237</sub> U <sub>238</sub> U <sub>239</sub> U <sub>240</sub> U <sub>241</sub> U <sub>242</sub> U <sub>243</sub> U <sub>244</sub> U <sub>245</sub> U <sub>246</sub> U <sub>247</sub> U <sub>248</sub> U <sub>249</sub> U <sub>250</sub> U <sub>251</sub> U <sub>252</sub> U <sub>253</sub> U <sub>254</sub> U <sub>255</sub> U <sub>256</sub> U <sub>257</sub> U <sub>258</sub> U <sub>259</sub> U <sub>260</sub> U <sub>261</sub> U <sub>262</sub> U <sub>263</sub> U <sub>264</sub> U <sub>265</sub> U <sub>266</sub> U <sub>267</sub> U <sub>268</sub> U <sub>269</sub> U <sub>270</sub> U <sub>271</sub> U <sub>272</sub> U <sub>273</sub> U <sub>274</sub> U <sub>275</sub> U <sub>276</sub> U <sub>277</sub> U <sub>278</sub> U <sub>279</sub> U <sub>280</sub> U <sub>281</sub> U <sub>282</sub> U <sub>283</sub> U <sub>284</sub> U <sub>285</sub> U <sub>286</sub> U <sub>287</sub> U <sub>288</sub> U <sub>289</sub> U <sub>290</sub> U <sub>291</sub> U <sub>292</sub> U <sub>293</sub> U <sub>294</sub> U <sub>295</sub> U <sub>296</sub> U <sub>297</sub> U <sub>298</sub> U <sub>299</sub> U <sub>300</sub> U <sub>301</sub> U <sub>302</sub> U <sub>303</sub> U <sub>304</sub> U <sub>305</sub> U <sub>306</sub> U <sub>307</sub> U <sub>308</sub> U <sub>309</sub> U <sub>310</sub> U <sub>311</sub> U <sub>312</sub> U <sub>313</sub> U <sub>314</sub> U <sub>315</sub> U <sub>316</sub> U <sub>317</sub> U <sub>318</sub> U <sub>319</sub> U <sub>320</sub> U <sub>321</sub> U <sub>322</sub> U <sub>323</sub> U <sub>324</sub> U <sub>325</sub> U <sub>326</sub> U <sub>327</sub> U <sub>328</sub> U <sub>329</sub> U <sub>330</sub> U <sub>331</sub> U <sub>332</sub> U <sub>333</sub> U <sub>334</sub> U <sub>335</sub> U <sub>336</sub> U <sub>337</sub> U <sub>338</sub> U <sub>339</sub> U <sub>340</sub> U <sub>341</sub> U <sub>342</sub> U <sub>343</sub> U <sub>344</sub> U <sub>345</sub> U <sub>346</sub> U <sub>347</sub> U <sub>348</sub> U <sub>349</sub> U <sub>350</sub> U <sub>351</sub> U <sub>352</sub> U <sub>353</sub> U <sub>354</sub> U <sub>355</sub> U <sub>356</sub> U <sub>357</sub> U <sub>358</sub> U <sub>359</sub> U <sub>360</sub> U <sub>361</sub> U <sub>362</sub> U <sub>363</sub> U <sub>364</sub> U <sub>365</sub> U <sub>366</sub> U <sub>367</sub> U <sub>368</sub> U <sub>369</sub> U <sub>370</sub> U <sub>371</sub> U <sub>372</sub> U <sub>373</sub> U <sub>374</sub> U <sub>375</sub> U <sub>376</sub> U <sub>377</sub> U <sub>378</sub> U <sub>379</sub> U <sub>380</sub> U <sub>381</sub> U <sub>382</sub> U <sub>383</sub> U <sub>384</sub> U <sub>385</sub> U <sub>386</sub> U <sub>387</sub> U <sub>388</sub> U <sub>389</sub> U <sub>390</sub> U <sub>391</sub> U <sub>392</sub> U <sub>393</sub> U <sub>394</sub> U <sub>395</sub> U <sub>396</sub> U <sub>397</sub> U <sub>398</sub> U <sub>399</sub> U <sub>400</sub> U <sub>401</sub> U <sub>402</sub> U <sub>403</sub> U <sub>404</sub> U <sub>405</sub> U <sub>406</sub> U <sub>407</sub> U <sub>408</sub> U <sub>409</sub> U <sub>410</sub> U <sub>411</sub> U <sub>412</sub> U <sub>413</sub> U <sub>414</sub> U <sub>415</sub> U <sub>416</sub> U <sub>417</sub> U
--------------------	---

[illegible]

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----